

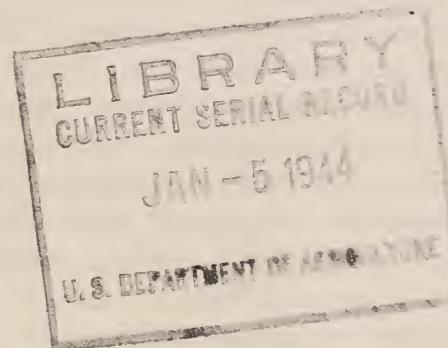
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May 1 UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
REGION SIX
ALBUQUERQUE, NEW MEXICO

STATEMENT OF APPROACH
ON
RANGE CONSERVATION



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STATEMENT OF APPROACH ON RANGE MANAGEMENT

INTRODUCTION:

THE FOLLOWING STATEMENT OF RANGE AND RANGE LIVESTOCK APPROACH BY OUR PERSONNEL IN THE FIELD TO RANGE OPERATORS WAS PREPARED BY THE VEGETATIVE ZONE TECHNICIANS. IT REPRESENTS THE COMBINED IDEAS OF THE SEVERAL ZONE MEN AS TO HOW AND WHAT TO PRESENT FOR THE BEST APPROACH ALONG RANGE AND RANGE LIVESTOCK PRODUCTION LINES AS WELL AS FOR SOIL AND WATER CONSERVATION.

THE ZONE MEN, IN PREPARING THIS, HAVE DRAWN ON THEIR EXPERIENCES AS FORMER TECHNICIANS AND ADMINISTRATORS, AND HAVE HAD ENOUGH YEARS OF OBSERVATION TO BELIEVE THAT THESE PROCEDURES AND POLICIES SHOULD BE STRESSED AS THOSE MOST PRACTICAL AND BENEFICIAL. THE PRESENTATION AS SET DOWN IS NOT A DEPARTURE FROM WHAT THIS REGION HAS BEEN DOING ON RANGE. THE STEPS, HOWEVER, ARE QUITE CLEARLY STATED AND SHOULD BE OF GREAT BENEFIT TO THE FIELD MEN IN THEIR RANGE WORK.

THE RANGE DIVISION WANTS TO RECOMMEND THAT FIELD MEN READ THIS PRESENTATION OVER CAREFULLY AND TRY TO PREPARE THEMSELVES TO MAKE SUCH AN APPROACH TO PROSPECTIVE COOPERATORS.

THE PERSONNEL RESPONSIBLE FOR THE RANGE PROGRAM ARE COGNIZANT OF THE PRIMARY OBJECTIVES IN GETTING RANGE CONSERVATION ESTABLISHED. THE TECHNIQUE, APPLICATION, AND SELLING OF THIS PROGRAM VARY WIDELY THROUGHOUT THE REGION AND MAY REQUIRE SLIGHTLY DIFFERENT APPROACHES FOR VARIOUS LOCATIONS.

THE FUNDAMENTALS OF PLANT PHYSIOLOGY AND PLANT ECOLOGY ARE RECOGNIZED BY ALL. HOWEVER, IN PRACTICAL APPLICATION, THERE ARE MANY WAYS IN WHICH THESE FUNDAMENTALS MAY BE IMPARTED TO THE USERS OF THE RANGE.

IN ORDER TO AROUSE INTEREST IN THE CONSERVATION PROGRAM, IT IS DESIRABLE TO SELECT A PORTION OF THE RANGE PROBLEM THAT APPEALS TO THE PROSPECTIVE COOPERATOR. SINCE IT MAY BE SAFELY ASSUMED A RANGE USER DERIVES A MAJOR PORTION OF HIS INCOME FROM THE POUNDS OF BEEF OR MUTTON AND WOOL HE PRODUCES, THEN LIVESTOCK PRODUCTION BECOMES THE MOST LOGICAL TOPIC OF CONVERSATION. THE APPROACH CAN BE AMPLIFIED AND CARRIED THROUGH THE VARIOUS LOGICAL STEPS OF LIVESTOCK PRODUCTION, FORAGE PRODUCTION, SOIL AND MOISTURE CONSERVATION, AND MANAGEMENT THROUGH TO THE ASSISTANCE WHICH THE SERVICE CAN RENDER EITHER SEPARATELY OR THROUGH A SOIL CONSERVATION DISTRICT.

ONE METHOD, AND WE BELIEVE A GOOD ONE, BY WHICH ALL THE FUNDAMENTALS MAY BE BROUGHT INTO THE PICTURE AND PORTRAYED CLEARLY IS DISCUSSED IN SEQUENCE IN THE FOLLOWING FIVE POINTS:

I. LIVESTOCK PRODUCTION

BECAUSE OF ITS IMMEDIATE IMPORTANCE TO THE LIVESTOCK PRODUCER, LIVESTOCK PRODUCTION IS ONE ITEM THAT USUALLY COMES UP FOR DISCUSSION. THE

PARALLEL BETWEEN LIVESTOCK PRODUCTION AND FORAGE PRODUCTION IS OFTEN MORE CLEARLY UNDERSTOOD BY THE RANGE OPERATOR THAN IF THE SUBJECT MATTER IS REVERSED AND FORAGE PRODUCTION IS USED AS A BASIC APPROACH, WITH LIVESTOCK PRODUCTION BEING DISCUSSED AS INCIDENTAL TO FORAGE PRODUCTION.

THE FIRST POINT TO CONSIDER UNDER LIVESTOCK PRODUCTION IS THE VALUE AND USE OF FEED BY LIVESTOCK. IF THE RANGE OPERATOR CLEARLY UNDERSTANDS THE IMPORTANCE OF FEED, IT GIVES HIM A VERY GOOD BACKGROUND FOR UNDERSTANDING THE IMPORTANCE OF SOIL AND MOISTURE CONSERVATION IN FORAGE PRODUCTION. IN ORDER TO CLEARLY UNDERSTAND THE VALUE OF FORAGE IN LIVESTOCK PRODUCTION, THE RELATIVE AMOUNT OF FEED CONSUMED BY LIVESTOCK THAT IS USED FOR BODY MAINTENANCE, AS COMPARED TO THAT AMOUNT USED FOR GAINS IN WEIGHT AND IN REPRODUCTION MUST BE CLEARLY UNDERSTOOD.

THE AMOUNT OF FEED NECESSARY IN NORMAL GROWTH MUST BE STRESSED. FOR INSTANCE, IT HAS BEEN DETERMINED BY EXPERIMENTATION THAT WHEN RATS ARE FED A RATION 25% BELOW NORMAL CONSUMPTION, REPRODUCTION IS AFFECTED ADVERSELY. CONVERSELY, IF ONE FLUSHES EWES, THAT IS, FURNISHES LARGE AMOUNTS OF SUCCULENT FEED JUST PRIOR TO THE BREEDING SEASON, THE RESULTS WILL BE TO MATERIALLY INCREASE THE NUMBER OF TWINS. ANY PRACTICAL DAIRYMAN WILL ALSO VOUCH FOR THE INCREASED AMOUNTS OF MILK HE OBTAINS FROM HIS HERD BY FURNISHING AN ADEQUATE AMOUNT OF A GOOD QUALITY FEED.

ALL EXPERIMENTS POINT TO THE FACT THAT LIVESTOCK PRODUCTION IS DEPENDENT UPON AMOUNTS AND QUALITY OF FEED. SUFFICIENT QUANTITY OF PROPER FEEDS BRINGS OUT THE BEST WITHIN THE LIMITS OF BREEDING, INCREASES WEIGHTS, IMPROVES MILK PRODUC-

TION, INCREASES CALF OR LAMB CROPS--IN FACT, ANY PHYSIOLOGICAL PROCESS WITHIN AN ANIMAL IS TIED UP WITH THE FEED THE ANIMAL CONSUMES.

IF WE HAVE CLEARLY STATED OUR CASE FOR LIVESTOCK PRODUCTION, WE ARE NOW READY TO TAKE UP OUR SECOND POINT--FORAGE PRODUCTION.

2. FORAGE PRODUCTION

SINCE WE HAVE SHOWN THAT RANGE LIVESTOCK PRODUCTION IS DEPENDENT LARGELY IN NEARLY ALL ITS PHASES ON RANGE FORAGE, FORAGE PRODUCTION THEN IS BASIC. IT IS TO THE LIVESTOCK OPERATOR'S BENEFIT TO PRODUCE AS LARGE FORAGE CROPS AS ARE POSSIBLE. FORAGE PRODUCTION CAN BE CLEARLY SHOWN TO THE OPERATOR BY DRAWING SIMILES, PARALLELS, OR COMPARISONS WITH LIVESTOCK PRODUCTION. PERHAPS HE IS MORE FAMILIAR, AND USUALLY IS, WITH LIVESTOCK PRODUCTION THAN HE IS WITH FORAGE PRODUCTION. THEREFORE, WE MAY DRAW CERTAIN PARALLELS IN THE MATTER OF MAINTENANCE.

WHEREAS A STEER HAS TO HAVE ADDITIONAL FEED OVER AND ABOVE A MAINTENANCE RATION TO PRODUCE GAINS, SO DOES A FORAGE PLANT. THE FIRST GROWTH A PLANT MAKES REQUIRES THE PLANT TO DRAW UPON THE RESERVE FOOD IN ITS ROOTS; SUBSEQUENTLY, ADEQUATE LEAVES ARE PRODUCED TO MANUFACTURE THE NECESSARY FOOD FOR PRODUCTION. IF THE USE IS SO HEAVY THAT NORMAL PLANT GROWTH, REPRODUCTION AND MAINTENANCE ARE PROHIBITED, THERE IS A DIRECT PARALLEL WITH INEFFICIENT USE OF FEED BY LIVESTOCK. IF TOO MANY HEAD OF LIVESTOCK ARE GRAZED ON LIMITED FEED, ALL FEED GOES FOR BODY MAINTENANCE AND NONE FOR PRODUCTION.

AFTER THE PHYSIOLOGICAL FUNCTIONS OF THE PLANT HAVE BEEN EXPLAINED AS CLEARLY AS POSSIBLE,

IT IS TIME FOR CERTAIN ECOLOGICAL FACTORS TO BE MENTIONED. THE IMPORTANCE HERE IS TO EMPHASIZE THAT OVERUSE OR USE WHICH INTERFERES WITH PHYSIOLOGICAL FUNCTIONS OF THE PLANT TO TOO GREAT A DEGREE WILL LESSEN THE FORAGE CROP PRODUCED. IN OTHER WORDS, IF ALL THE LEAVES ARE CONSUMED AS FAST AS THEY ARE PRODUCED, THE PLANTS' GROWTH AND FORAGE CROP CAN AND WILL BE MATERIALLY REDUCED.

IT SHOULD BE EMPHASIZED THAT THE MORE PALATABLE SPECIES ARE USUALLY THOSE THAT ARE MOST SEVERELY AND READILY AFFECTED IN THIS REGARD BECAUSE LIVESTOCK PREFER THESE PLANTS AND CONSEQUENTLY EAT MORE OF THE LEAF GROWTH AND PREVENT SUCH PLANTS FROM MATURING PROPERLY. THE UNPALATABLE SPECIES, OR LESS DESIRABLE SPECIES, ON THE OTHER HAND, WILL NOT BE GRAZED TO THE POINT THAT THEY ARE DAMAGED AND CONSEQUENTLY THEIR REPRODUCTIVE AND GROWTH PROCESSES CONTINUE. THEREFORE, THE LESS DESIRABLE PLANTS GO TO SEED AND INCREASE IN THE PERCENTAGE OF VEGETATIVE COMPOSITION. THIS LEADS DIRECTLY TO A DISCUSSION OF RANGE CONDITION CLASSES OR, BETTER, THE FUNDAMENTAL FACTORS DETERMINING THE CONDITION OF THE RANGE.

RANGE PLANTS ARE IN BALANCE WITH THEIR ENVIRONMENT BUT THE CONDITION IS NOT STATIC. AS FACTORS AFFECTING THE ENVIRONMENT CHANGE, SO DOES THE CONDITION OF THE RANGE. UNDER ADVERSE CONDITIONS THE RANGE CONDITION BECOMES LESS DESIRABLE. CONVERSELY SPEAKING, UNDER FAVORABLE CONDITIONS THE CONDITION OF RANGE VEGETATION IMPROVES.

ANY MAP, CHART, DIAGRAM OR OTHER DESCRIPTIVE MATERIAL IS OF LITTLE USE UNLESS ALL THE ATTENDANT FACTORS ARE KNOWN AND EXPLAINABLE IN COMMON EVERYDAY TERMS, SUCH AS POUNDS OF BEEF AND WOOL OR LAMB AND CALF CROPS.

IF RANGE ANIMALS COULD BE DIRECTED AS TO WHEN AND WHAT TO EAT, OUR PROBLEM WOULD BE LESS DIFFICULT. HOWEVER, SUCH IS NOT POSSIBLE. BY PROPER MANAGEMENT IT IS POSSIBLE TO PROVIDE THE MOST DESIRABLE FORAGE BOTH IN QUANTITY AND QUALITY WITHIN LIMITS OF ENVIRONMENT.

A PARALLEL MAY BE DRAWN HERE BETWEEN IMPROVING AND MAINTAINING QUALITY IN LIVESTOCK AND QUALITY OF RANGE FORAGE. IN A LIVESTOCK HERD, ONE PURCHASES AND ATTEMPTS TO BREED A GOOD QUALITY OF LIVESTOCK SO THAT AN OPTIMUM USE CAN BE MADE OF SOIL AND MOISTURE RESOURCES. LIKEWISE PLANT MANAGEMENT INCLUDES THE PROTECTION OF VALUABLE FORAGE SPECIES SO THEY CAN SUCCESSFULLY COMPETE WITH THE LESS PALATABLE AND LESS VALUABLE PLANTS. WHEREAS IMPROVEMENT MIGHT BE MADE IN PLANT VIGOR WITHIN ANY GIVEN VEGETATIVE TYPE IN A RELATIVELY SHORT PERIOD OF TIME, TO GET AN ACTUAL CHANGE IN VEGETATIVE COMPOSITION MIGHT REQUIRE A LONGER PERIOD OF TIME. THIS IS PARTICULARLY TRUE WHERE THE VEGETATIVE COVER HOLDS A DELICATE BALANCE DUE TO EXTREME CLIMATIC OR SOIL CONDITIONS.

IN ORDER TO IMPROVE THE RANGE CONDITION CLASS OR THE CONDITION OF THE FORAGE PLANTS, OTHER FACTORS MAY AND SHOULD BE MENTIONED. FOR EXAMPLE, WITH NO OVERGROWTH, PLANTS ARE MORE VIGOROUS, THEY GREEN UP QUICKER IN THE SPRING, GROW HIGHER, AND WILL HAVE A HIGHER NUTRITIVE VALUE.

SINCE LIVESTOCK PRODUCTION DEPENDS ON FORAGE, IT FOLLOWS THAT FORAGE PRODUCTION DEPENDS ON SOIL AND MOISTURE. THIS BRINGS US TO OUR THIRD TOPIC--SOIL CONSERVATION.

3. SOIL CONSERVATION

A FERTILE SOIL CONTAINS SUFFICIENT AMOUNTS OF THE BASIC ELEMENTS ESSENTIAL TO PLANT GROWTH. IT IS ESSENTIAL THAT THESE NUTRIENTS BE WISELY USED IF A LARGE CROP OF FORAGE IS TO BE PRODUCED. THERE IS NO USE WASTING MINERALS THAT THE PLANT CAN USE SINCE MANY OF THESE MINERALS IN OUR SOUTH-WESTERN SOILS MAY ONLY EXIST IN LIMITED QUANTITIES OR, EVEN THOUGH PLENTIFUL, CANNOT BE ASSIMILATED BY PLANTS.

IT IS TO THE OPERATOR'S ADVANTAGE TO SAVE AND TO USE IN THE MOST ECONOMICAL WAY ANY AVAILABLE PLANT NUTRIENTS IN THE SOIL. IF THESE NUTRIENTS ARE WASHED AWAY BY EXCESSIVE RUNOFF, LEACHED OUT OF THE SOIL, OR USED BY UNPALATABLE PLANTS, THE FORAGE CROPS WILL BE REDUCED. IN TURN, THE LIVESTOCK PRODUCTION WILL BE REDUCED ON A GIVEN AREA AND THE RESULT WILL BE LOWER RETURNS FROM THE RANCHING OPERATION.

OBSERVATIONS, BOTH CASUAL AND EXPERIMENTAL, SHOW THAT A VEGETATIVE COVER OVER THE SOIL MANTLE IS A PRACTICAL CONTROL OF RUNOFF AND THE ACCOMPANYING SOIL LOSSES. THERE IS NO REASON WHY, THROUGH PROPER USE AND MANAGEMENT, OPTIMUM USE AND DEVELOPMENT OF THE AVAILABLE FORAGE PLANTS CANNOT GO ON AT THE SAME TIME PROTECTION AGAINST RUNOFF AND SOIL LOSS IS BEING AFFORDED.

4. WATER CONSERVATION

WATER MAY LIMIT THE PRODUCTION OF FORAGE IN ANY GIVEN AREA. PROBABLY, IN OUR WESTERN RANGE STATES, LIVESTOCK PRODUCERS ARE MORE CONSCIOUS OF WATER WASTAGE THAN THEY ARE OF SOIL WASTAGE. WE SHOULD TAKE ADVANTAGE OF THIS POINT IN TRYING TO

CONSERVE OUR RANGES. IF OVERUSE OF RANGES PERMITS EXCESSIVE RUNOFF OF THE LIMITED AMOUNT OF MOISTURE THAT FALLS, THIS SHOULD BE POINTED OUT FOR IT NOT ONLY ROBS THE PLANTS OF MUCH NEEDED MOISTURE, BUT IT ALSO CARRIES WITH IT A CERTAIN AMOUNT OF PLANT NUTRIENTS AS POINTED OUT IN THE DISCUSSION OF SOIL CONSERVATION. WE CANNOT HOPE TO HOLD WATER ON OUR RANGES IF EVERY LAST LEAF OF GRASS IS UTILIZED. TO HAVE SUCH SEVERE UTILIZATION WOULD RESULT IN LITTLE, IF ANY, MECHANICAL OBSTRUCTION TO RETARD WATERFLOW, INCREASE PENETRATION AND PROVIDE GOOD TILTH FOR IMPROVED PLANT GROWTH.

IT IS TO THE OPERATOR'S ADVANTAGE TO LEAVE ENOUGH PLANT GROWTH ON THE GROUND TO HOLD IN PLACE INsofar AS POSSIBLE THE WATER THAT FALLS. THE ADVANTAGE OF THIS CAN BE ILLUSTRATED BY THE FOLLOWING EXAMPLE: IF WE ARE IN AN AREA OF 15-INCH RAINFALL, WE CANNOT EXPECT TO GROW AS MANY GOOD HEAVY CALVES ON ANY GIVEN AREA OF LAND IF ONE-HALF OR ONE-THIRD OF THE WATER RUNS OFF AS WOULD BE POSSIBLE IF WE ARE ABLE TO HOLD ALL 15 INCHES OF WATER IN PLACE SO THAT THE FORAGE CROP COULD BENEFIT BY ALL OF THE 15 INCHES.

EXPERIMENTATION UNDER FIELD CONDITIONS HAS SHOWN THAT THE RATE OF INFILTRATION OF WATER INTO THE SOIL IS INCREASED BY THE PRESENCE OF A MULCH AS COMPARED TO A BARE SOIL. A SAVING IN MOISTURE OF 20% MAY INCREASE FORAGE 50%. IT, THEREFORE, BECOMES INCREASINGLY IMPORTANT TO PROVIDE A MULCH OF GRASS AND OTHER NATIVE VEGETATION TO ASSIST IN MOISTURE PENETRATION AND TO REDUCE WATER LOSSES. (SEE "THE EFFECT OF SURFACE MULCHES ON WATER CONSERVATION AND FORAGE PRODUCTION IN SOME SEMIDESERT GRASSLAND SOILS," BY E. L. BEUTNER AND DARWIN ANDERSON, JOURNAL OF THE AMERICAN SOCIETY OF AGRONOMY, MAY 1943.)

IN BRINGING ABOUT CONSERVATION, AFTER THE ABOVE BROAD EDUCATIONAL EXPLANATION HAS BEEN MADE, THERE ARE CERTAIN THINGS WE CAN HELP THE OPERATOR TO DO.

5. ASSISTANCE AVAILABLE

ASSISTANCE WITH EQUIPMENT AND ENGINEERING HELP IS GENERALLY UNDERSTOOD AND HAS BEEN THE POINT UPON WHICH MUCH RANGE CONSERVATION HAS BEEN SOLD IN THE PAST. HOWEVER, TECHNICAL RANGE ASSISTANCE IS NOT SO FULLY UNDERSTOOD. TO POINT OUT THIS FORM OF ASSISTANCE, ONE CAN MENTION THAT IT IS THE POLICY WITHIN THIS REGION TO TEACH THAT FORESIGHT IS ESSENTIAL IN RANGE CONSERVATION. IN OTHER WORDS, WE HAVE ATTEMPTED TO FORESTALL CURRENT OVERUSE RATHER THAN TELLING COOPERATORS ONLY ABOUT OVERUSE AFTER IT HAS OCCURRED.

WE FEEL THAT A UTILIZATION CHECK MADE WITH THE OPERATOR AT THE BEGINNING OR END OF THE GROWING-SEASON CAN SERVE AS A MORE VALUABLE BASE FROM WHICH LIVESTOCK ADJUSTMENTS CAN BE MADE THAN TO OBSERVE THE RESULTS OF GRAZING AT THE END OF THE GRAZING SEASON. THIS VARIES ON SEASONAL RANGES, DEPENDING ON THE MOST OPPORTUNE TIME FOR MAKING RANGE INSPECTIONS AND ADJUSTMENTS. THE FLUCTUATION OF VOLUME OF FORAGE FROM YEAR TO YEAR DUE TO CLIMATE IS EVEN GREATER THAN FLUCTUATIONS IN RAINFALL AND MUST BE RECOGNIZED BY ADJUSTMENTS IN MANAGEMENT. LOCAL RAINFALL RECORDS PROVIDE EXCELLENT MATERIAL TO IMPRESS OPERATORS WITH THIS POINT.

THE DISCUSSION OF LIVESTOCK PRODUCTION WITH A RANCHER LAYS THE GROUNDWORK FOR A SPECIFIC RANGE CONSERVATION PROGRAM ON HIS RANCH. GIVING HIM SUFFICIENT BACKGROUND INFORMATION ON PRODUCTION AND RELATED SUBJECTS GENERALLY CREATES A DESIRE ON HIS PART TO IMPROVE HIS RANGE FORAGE.

A BEGINNING HAS BEEN MADE. THE OPERATOR SHOULD HAVE EXPLAINED TO HIM IN MORE DETAIL THE DISADVANTAGES OF OVERUSE AND BE SHOWN LONG-TIME RECORDS ON RAINFALL AT THE NEAREST POINT AVAILABLE TO HIS RANCH. IT IS WELL TO POINT OUT FURTHER THAT HIS VOLUME OF FORAGE WILL VARY GREATLY FROM YEAR TO YEAR AND IT IS ONLY LOGICAL IF HE IS TO GET HIGH PRODUCTION THAT HE MUST FOLLOW WHATEVER CLIMATE DICTATES RATHER THAN TO DICTATE TO CLIMATE. THERE IS USUALLY CONSIDERABLE LOCAL DATA AND KNOWLEDGE TO SUPPORT THIS POINT.

HE IS ALSO TOLD, IF A CATTLE RAISER, HOW HE MAY HAVE A MORE FLEXIBLE MANAGEMENT BY EITHER HOLDING OR SELLING HIS WEANED STEER CALVES. WHEN NECESSARY, THE BREEDING HERD, WHETHER COWS OR EWES, CAN BE DECREASED OR INCREASED. WHILE THIS TYPE OF MANAGEMENT IS APPARENT TO MANY OF US, IT APPEARS TO BE A RATHER NEW TREND OF THOUGHT ON THE PART OF MANY RANCHERS.

NOW THE RANCHER SHOULD BE SOLD ON PROPERLY ADJUSTING TO HIS FEED AND MAKING TIMELY ADJUSTMENTS WITH A FLUCTUATING FEED SUPPLY RATHER THAN WITH A STABLE ONE. PLANT VIGOR OF THE MORE VALUABLE SPECIES WILL DICTATE A CONSIDERABLE PORTION OF WHAT IS AGREED ON NEXT. IF VIGOR IS POOR AND THERE ARE A FEW GOOD FORAGE PLANTS, (A CONDITION WHICH MIGHT PLACE THE RANCH IN A "POOR" TO "FAIR" RANGE CONDITION CLASS), ONE CAN:

1. DRASTICALLY REDUCE NUMBERS.
2. GRAZE THE RANGE AT A TIME TO UTILIZE THE LESS PALATABLE PLANTS MORE FULLY WITHOUT DAMAGE TO THE BETTER PLANTS,
AND/OR

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3. USE THE RANGE WITH THE KIND OF LIVESTOCK THAT WILL UTILIZE THE FORAGE WITH THE LEAST AMOUNT OF DAMAGE TO THE DESIRABLE SPECIES.

ONCE THIS MANAGEMENT PLAN HAS BEEN DEVISED, IT MUST BE COORDINATED WITH ANIMAL HUSBANDRY PRACTICES, SUCH AS BREEDING DATES, LAMBING OR CALVING DATES, WEANING DATES, ETC. WE ARE THEN IN A POSITION TO ESTABLISH A PLAN OF CONSERVATION OPERATIONS. THE OPERATOR AGREES TO PERFORM SUCH MANAGEMENT OR STRUCTURAL TREATMENT THAT IS NECESSARY TO CARRY OUT THE IMPROVED MANAGEMENT OF HIS RANGE. BUT, IN FACT, THE CONSERVATION PROGRAM HAS JUST BEEN STARTED.

EACH YEAR, AT LEAST ONE CHECK MUST BE MADE ON THE AREA TO OBSERVE THE RESULTS OF THE MANAGEMENT AND TO TAKE WHATEVER ADJUSTMENTS MAY BE NECESSARY. AT THIS TIME, ANY OF THE POINTS PREVIOUSLY DISCUSSED MAY BE DISCUSSED AGAIN WITH THE OPERATOR AND ACTUAL EXAMPLES POINTED OUT TO HIM ON THE GROUND. AT THE SAME TIME, THE RANGE EXAMINER IS MAKING AN EVALUATION OF THE PLAN AS IT OPERATES AND MAY HAVE VALUABLE SUGGESTIONS TO MAKE AS THE OPERATIONS CONTINUE THEREBY THE FORAGE CAN BE IMPROVED THROUGH MANAGEMENT AND SOIL AND MOISTURE CONSERVATION, THEREBY IMPROVING LIVESTOCK PRODUCTION.

THE RECOGNITION OF A FLUCTUATING FORAGE CROP AND THE DESIRABILITY OF MAKING TIMELY LIVESTOCK ADJUSTMENTS SO THAT DAMAGE FROM OVERUSE WILL NOT RESULT ARE NECESSARY FOR THE CARE OF THE RANGE AND FOR HIGH LIVESTOCK PRODUCTION. IN ADDITION TO THESE POINTS, THIS REGION'S VEGETATIVE TECHNICAL PERSONNEL HAVE IN MIND AND HAVE APPLIED AS MUCH AS POSSIBLE CURRENT INFORMATION ON THE BEST SEASON OF USE, RANGE READINESS, USE OF ANNUALS, ROTATION AND OTHER TECHNICAL DATA.